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ABSTRACT

This study examines issues of unethical hunting practices and promotion of ethical hunter behavior in the United States and Canada. Hunter education coordinators (HECs) in all states and provinces were surveyed, with a response rate of 66 percent. Results indicate: (1) there has been little change in the types of hunter ethics problems in recent years; (2) trespassing is the worst problem followed by road hunting; (3) deer is most often the target of illegal or unethical hunter behavior; (4) half of the U.S. respondents indicated a decline in the relationship between hunters and landowners over the last 5 years; (5) most respondents suggested that stricter enforcement be accompanied by more effective educational efforts but that the current hunter education curriculum not be changed; and (6) there appears to be an inadequate effort to measure the effects of hunter education. Recommendations include: (1) HECs and instructors should commit to elevating hunter ethics and responsibility to the same status as hunter safety; (2) experienced adult hunters should be targeted for hunter ethics education and/or outreach programs; (3) a standard evaluation instrument needs to be adopted and used to evaluate the effectiveness of hunter education and outreach efforts; and (4) hunter education instructors should be involved more closely in the evaluation of problems and development of hunter education solutions to promote better hunter ethics. Appendices provide survey data. (LP)

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HUNTER ETHICS:

A Look at Hunter Behavior and Hunter Education in the U.S. and Canada

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By Denis S. Elliott
Izaak Walton League of America
August 1991

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HUNTER ETHICS:
A Look at Hunter Behavior and Hunter Education in the U.S. and Canada

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Defenders of soil, air, woods, waters and wildlife

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International Association of Fish and Wildlife Agencies
(Organized July 20, 1902)

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Hunter ethics is a subject a lot of us in wildlife and natural resource management talk about. In fact, to some of us, no issue is more important to the future of hunting and wildlife management. How hunters act determines how the public views them, and unfortunately the actions of a few reflect adversely on hunters in general. Those of us who care about the future of hunting have to ask ourselves just what is happening with our sport, and that's where studies like this come in.

Earlier this year I suggested it may be time to review the 1981 report on hunter education which was produced by the International Association of Fish and Wildlife Agencies. While this study isn't a comprehensive review, it does take a hard look at the ethics/responsibility portion of hunter education. It also makes an assessment of the general state of hunter ethics in the U.S. and Canada. Some of us may not be pleased with the findings, but we have to look for, define and take action to solve any problems that exist.

This report makes a number of observations about hunter behavior and hunter education. There is probably no one who will agree with all of them, but we should all take some time to review and think about the findings of this study. There are also several recommendations at the end of the report. They are timely, and any agency not already looking to apply them should start to do so as soon as possible.

R. Max Peterson
Executive Vice President
International Association of
Fish and Wildlife Agencies

THE IZAAK WALTON

LEAGUE OF AMERICA

The Izaak Walton League of America's commitment to outdoor ethics goes back nearly 70 years. Responsible use of the outdoors, a major League priority on the day the organization was born in 1922, remains very high on our agenda in the 1990s. Rapidly disappearing habitats, dramatically increased numbers of recreation seekers, highly creative and fast-paced technological change, and the never-ending urbanization of society all argue strongly for even greater emphasis on the ethical outdoor experience.

No form of recreation is under greater public scrutiny than hunting. The League has always been a strong supporter of hunting both as an important wildlife management tool and legitimate and time-honored outdoor recreation practice. With hunting and hunters getting increased attention by the media, academia and the public at large, it is vital that hunters and wildlife managers strive to eliminate unethical hunting practices and drive irresponsible hunters from the sport.

In April 1922, the famed western storyteller and noted outdoorsman Zane Grey penned these lines for a front-page editorial which appeared in the second issue of the League's national magazine:

> "If honest and direct appeal fails to win thoughtless and ignorant hunters and fishermen to our cause, then they must be scorned and flayed and ostracized until they are ashamed of their selfishness."

Grey's words remain true today. Every hunter who wants to keep this tradition alive and well should heed his wise counsel. But there is another course of action. That is to teach and inspire the hunters, especially beginners, to be the embodiment of the word "sportsman." Ethics, after all, is not something we acquire by instinct. It is something learned. Based on what we teach now, each hunter will either be a credit to the sport or a liability. Our goal should be to welcome ethical hunters to the sport, not just drive the unethical out. We issue this report with that thought in mind. We welcome your comments.

Jack Lorenz
Executive Director
Izaak Walton League of America

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The hunter ethics study, and therefore this report, would not have been possible without the help of many people. First, my thanks to Jack Lorenz and Maitland Sharpe of the Izaak Walton League of America (IWLA) for their support and guidance as this project unfolded.

There are many individuals and groups with an interest in the topics discussed in this report. Some agreed to serve on a study oversight group, and were generous with both their time and advice. I would like to thank the following individuals for serving on the study oversight committee:

Robert Byrne - Wildlife Management Institute
Robert Delfay - National Shooting Sports Foundation
Dennis Eggers - National Rifle Association
Clair Huff - Hunter Education Association
Dr. Robert Jackson - University of Wisconsin, LaCrosse
R. Max Peterson - International Association of Fish and Wildlife Agencies
Dr. Brett Wright - George Mason University

Thanks also go to Paul Wilson of the Fish and Wildlife Reference Service and to J. Allan Tyler and Lance Roberts. I am also indebted to Laury Marshall-Forbes and Kristin Merriman-Clarke of the IWLA national staff for their help with the production of this report.

Finally, all of us who care about the future of hunting owe our thanks to those who provided the information on which this report is based. For some of the hunter education coordinators, completing the survey items required time and effort above and beyond the call of duty. Many of us have put a great deal of time and effort into this project, but it is clear there are more questions and answers than are discussed here. I have tried to summarize the key issues in a manner understandable to the general public, but I make no claims as to this being the definitive work on hunter ethics and hunter education.

This report is the sole responsibility of the Izaak Walton League of America. While I appreciate the assistance of those acknowledged here (and others), they are in no way responsible for its contents.

COVER ART BY JOHN HEINLY

Executive Summary

This study examined two subjects: hunter behavior and how ethical hunter behavior is promoted.

Hunter education coordinators in all states and provinces were surveyed on hunter behavior, how their state or province promotes hunter ethics, and whether their education/outreach efforts showed any measurable effects. This group was chosen because some of the information sought involves subjective judgements, and the coordinators appeared to be in the best position to obtain and interpret information sought in this study. Many of the survey items asked the respondent to give the basis of their answers, and most had to contact several other individuals to complete the survey.

According to survey participants, in recent years there has been little change in the type(s) of hunter ethics problems with which they deal. Trespassing appears to be the worst problem, followed by road hunting (which could also be considered a form of trespass). Deer appears to be the species which is most often the focus of illegal or unethical hunter behavior. Half of the U.S. respondents indicated a decline in the relationship between hunters and landowners over the last five years, and in both the U.S. and Canada most indicated the closure of private land to hunting was increasing. When asked to list the main reasons for such closings, trespassing, poor hunter attitude/behavior, and vandalism or destruction of property were the most frequently listed reasons.

Despite the fact penalties for wildlife violations have increased in recent years, most respondents indicated stricter enforcement must accompany more effective education/outreach efforts. Hunter education is the primary means by which hunter ethics is promoted, and most of the respondents agree with the concept that ethical or responsible hunter behavior should play a larger role. However, there seems to be significant opposition to modifying the current hunter education curriculum.

The information acquired in this study provides little basis for saying any states or provinces are measurably more effective in promoting hunter ethics. Although some data show some improvements, other data show a decline. It should also be noted that overall, there is an inadequate effort to measure the effects (if any) of hunter education on hunter behavior.

This report includes several recommendations for improving our ability to promote higher ethical standards among hunters. There appears to be a contradiction between the desire to improve the ethics/responsibility portion of hunter education and the willingness to alter the course curriculum. However, there will likely be at least some changes to hunter education in coming years.

During the past decade the percentage of hunter education course time devoted to ethics/responsibility has been reduced by half. We should commit to altering the basic hunter education course to ensure the ethics/responsibility portion is elevated to equal status with safety. However, we cannot be satisfied with working only through hunter education courses. Such courses mainly reach beginning hunters, and older hunters are in need of a targeted hunter ethics outreach initiative. Hunter education graduates need to have the lessons of the classroom demonstrated in the field.

Another area in which improvement is needed is monitoring the cause and effect of efforts to promote ethical hunter behavior. There needs to be a commitment to adopting and using standardized evaluation methods that go beyond accident reports or numbers of citations written for wildlife law violations. We can and should involve instructors in this process, since they are in a unique position to monitor attitudes and behaviors in their communities.

During the past year, numerous instructors expressed interest in participating in this study. This suggests (and hunter education coordinators agree) a large scale assessment of instructors' opinions on hunter education is in order. Specifically, we should seek their input on what changes should be made in both the hunter education course ***and*** their training. Hunter education instructors also may provide valuable insight on how to reach older hunters who have never been to, nor are likely to attend, a hunter education course.

I. Introduction

Among wildlife professionals, hunter ethics have become a subject of considerable discussion, despite the fact there is little data on the topic. The human dimension of wildlife management has become a field of study for researchers. However, research on hunter behavior has been largely local or statewide in scope. The findings of such research, combined with personal anecdotes, serve as the basis for numerous articles advocating ethical hunter behavior. These articles often imply the unethical behaviors discussed are widespread when, in fact, there has been little effort to assess hunter behavior and ethics nationally.

There is no doubt hunting, and more specifically hunter behavior, has come under intense scrutiny by the media in recent years. Discussion of hunter behavior is found not only in hunting publications, but in mainstream publications as well. For instance, the cover story of the Feb. 5, 1990, issue of *U.S. News and World Report* dealt with the question of whether hunting should be banned. The Dec. 10, 1990, issue of *Time* carried a piece in its Highlights section about the increasingly effective law enforcement tactic of using decoy deer to catch road hunters. And most hunters by now are aware of the controversial article "The Killing Game" by Joy Williams in the October 1990 issue of *Esquire*. Hunting and hunter behavior also are being featured more frequently in the electronic media, usually in the form of stories about hunting protests.

In his remarks to the 1991 meeting of the Hunter Education Association, International Association of Fish and Wildlife Agencies (IAFWA) Executive Vice-President Max Peterson said hunter ethics is the highest priority issue facing hunting today. At the same meeting, Larry Jahn, chairman of the newly formed United Conservation Alliance, expressed similar views. Concerns about hunter behavior are not new. Izaak Walton League of America (IWLA) Executive Director Jack Lorenz formed the League's Outdoor Ethics Program in 1976, largely due to concerns about hunter behavior or, more appropriately, misbehavior. What is new is the realization among hunters that some of their actions, particularly those which are illegal or unethical, have played a significant role in the growth of the animal rights/anti-hunting movement.

There is no doubt anti-hunters have been effective in cultivating an image of legions of unsafe, unethical and downright irresponsible hunters destroying our remaining natural resources and wildlife. The average hunter is quick to take exception to the "slob" or "Bubba" image promoted by anti-hunters. But even the average hunter agrees such persons exist. The question is how many such hunters are there, and are they the exception or the rule? Another more troubling question is how many hunters who are generally responsible and ethical sometimes stray from their normal standards of right and wrong? This study, which takes into account state-level research on hunter behavior, provides a clearer understanding of the current state of hunter ethics nationwide.

Along with evaluating hunter behavior, this study also examined how, and how well (or poorly) ethical/responsible hunter behavior is promoted. Each state and province has a hunter education program (most of which are mandatory for first-time hunters) in which at least part of the instruction is devoted to hunter ethics. Most have additional means of education/outreach to hunters in which ethical behavior is or can be encouraged.

Compiling and sharing information on what is or is not effective saves both time and money which, according to most hunter education coordinators (HECs), are the most serious impediments to modifying or improving their respective programs. The information gathered in this study will serve as a baseline reference on hunter behavior and hunter education/outreach methods of promoting hunter ethics nationwide. HECs can use the information in this report to compare their individual circumstances and learn from the successes or failures of others. It can also, along with other research, be used to improve the ability of hunter education/outreach in North America to promote higher ethical standards among hunters.

At the suggestion of the IAFWA, this study includes hunter ethics and education in Canada as well as the U.S. There are marked differences in demographics and land use between the two countries, and it was reasonable to assume this study might reveal such differences. Where this turned out to be the case, results are presented separately.

II. Study Design and Objectives

This study focused on two separate aspects of hunter ethics: the scope and nature of unethical hunting practices, and which hunter education programs or other outreach efforts appear to be most effective in overcoming unethical or undesirable hunter behavior. The following conditions were assumed to exist:

1. Legal and ethical standards vary among states and regions.
2. Different jurisdictions have varying degrees of success or problems with hunter ethics.

3. Variations in how hunter ethics is promoted in different jurisdictions make some more effective than others in promoting ethical hunting practices.

At the beginning of this study, it was decided to adopt a needs assessment approach, since no research specific to hunter ethics has been undertaken on a national scale. The 1981 IAFWA report on hunter education provided a model for program self-evaluation, and in 1989 the U.S. Fish and Wildlife Service (USFWS) published a comprehensive hunter education needs assessment handbook. In theory, the results of individual state needs assessments could be combined into a national scale assessment. Theory and reality have a way of differing however, and preliminary inquiry indicated limited use of either needs assessment model. This study was conducted from the viewpoint that multi-step information gathering would be used to determine what information and records would be widely available. Telephone inquiries were used to develop a short questionnaire, and the responses confirmed there were widely varying attempts to evaluate program effectiveness and needs. Early levels of inquiry also confirmed the impression hunter education courses are the primary means of promoting hunter ethics.

Given the separate but interrelated goals of this study, it seemed clear that state and provincial HECs were in the best position to evaluate (and research where necessary) questions about hunter behavior and the effectiveness or shortcomings of education and outreach. In administering their programs, HECs train and work with instructors to make sure the course is responsive to current needs and issues. Therefore, they either compile or have access to the type of information sought in this study. HECs who completed the main survey were asked to answer several questions about their information gathering efforts. On average, they had to contact four people in two departments to obtain information needed to answer survey questions.

Comments by the HECs on the main survey made it clear that for most completion of the survey was quite difficult. Many were concerned their responses were based more on "educated guesses" than scientifically obtained data. This suggests periodic reviews such as this are needed to ensure hunter education and outreach are responsive to whatever needs exist. Although this is not an attractive prospect for most HECs since subjective topics such as ethics are not easily measured (as are accident rates), we should commit to such a process. Since the various organizations governing hunter education agree hunter ethics and the hunters' role in wildlife management should be significantly increased, and since live firing will probably become a requirement for certification in the near future, it is likely there will be changes in hunter education. The effects of such changes (if any) should be measured.

Although some questions posed to the hunter education coordinators asked for quantifiable responses in the form of Likert scales, the majority were open-ended questions. While this process is admittedly subjective, the needs assessment approach allows for the use of subjective survey items to qualify objective data.

The main survey was somewhat lengthy, and response was not as great as originally hoped. By the end of June 1991, response was just over 66 percent with no differences in rate of response between the U.S. and Canada. A decision was made to issue this report with the information in hand, and as more responses are received, the data will be updated. However, it appears doubtful additional responses will significantly alter the findings reported here.

III. Hunter Behavior and Ethics

The 1980s saw many well-publicized scandals (i.e., Wall Street, politics, college sports) in which the pursuit or attainment of some goal resulted in unethical behavior or practices. While it is interesting to consider the wide variety of common ethical lapses, this report was of course limited to the degree of ethics displayed by hunters. Grosslein (1980), in discussing hunter education stated, "As humans, we seem to have an innate capacity to occasionally ignore rules, whether it's while we are hunting, working, or driving the family car. The specific reasons are likely to be nearly as numerous as the situations in which they occur. However, we feel that most could be summed up with three basic categories: (1) ignorance; (2) frustration; and (3) willful defiance."

In the Winter/Spring 1991 issue of the *Coalition for Education in the Outdoors* newsletter, Editor Bruce Matthews noted, "As with any human activity, hunting is engaged in by individuals with varying responsibility. For some hunters, a significant gap exists between where they are and where they ought to be." Similar opinions have been expressed with increasing frequency in recent years, and there is a growing body of research supporting such writings. There also has been research conducted into the general populations' opinions on hunters and hunting. In the late 1970s, the National Shooting Sports Foundation commissioned a study of adults who professed neutrality on the subject

of hunting. While reporting the findings to the IWLA 1980 National Conference on Outdoor Ethics Painter said, "People by and large had no real complaint against hunting. But they had strong feelings against the hunter — perceiving him to be an ill-informed, unskilled fellow who is dangerous to himself and his own kind, can't shoot, is deficient in woodscraft and isn't a very good citizen with respect to the rights of others, particularly landowners." Kellert (1980), when reporting the findings of a study of public attitudes on hunting stated, "The implication was that hunting was too serious an activity to be engaged in solely for sporting or recreational benefits, but acceptable if the animal's meat was consumed."

In discussing this study with members of the advisory committee (and others), there was a consensus that, in the future, wildlife management will increasingly become a matter of people management. Research into hunter attitudes and behavior (particularly with respect to hunter/landowner relations) has been conducted in several different parts of the United States, and some studies have examined these topics on a national scale.

Since many of the questions this study posed to hunter education coordinators involved subjective interpretations, their validity could be open to some question. However, since hunter behavior has become an area of study by researchers, there is a growing body of objective data supporting the findings in this report. Although some of the material cited in this report dates back to the 1970s, the intent here is to evaluate the current state of hunter ethics. However, it is important to examine trends in order to understand how we got to where we are today, and this study is concerned mostly with hunter behavior and ethics from the mid-1980s to present. Since attitudes affect behavior, it is tempting to consider both at the same time, but each is deserving of separate examination.

Hunter Attitudes

No assessment of hunter ethics would be complete without examining the values or attitudes that lead to good or improper behavior. One area in which there is regrettably little research is the difference between rural and urban hunters. During the past two decades the U.S. population base had shifted from predominantly rural/small town to urban/suburban, which may account for some of the apparent behavioral changes in hunters. Comments both from HECs and others whose opinions on this subject were sought give the impression that in some places, an "us vs. them" mentality exists between urban and rural hunters. This sometimes causes individuals from both groups to rationalize unethical behavior because "the city/country folks cheat." It appears despite differences in the way urban and rural people view wildlife and natural resources, individuals (including hunters) from both groups can and do abuse them.

Another area in which relatively little work has been done is understanding the way in which youngsters or first-time hunters are influenced by the individuals teaching them to hunt. Louisiana hunters have been severely criticized in recent years for their waterfowl hunting practices which too often involve killing far more than the limit. Since the state is the primary wintering ground for North American waterfowl, there appears to be an abundance of game, and many local hunters have the same attitude as the early settlers of this continent, mainly that such abundant wildlife populations can never be hurt no matter how much is harvested. Such attitudes are passed down to succeeding generations, making change difficult. According to the USFWS senior resident agent in the area, enforcement alone is an incomplete solution, but changing attitudes is a slow process. Traditions and economics make it difficult to convince people to change their ways, especially when there appears to be so much wildlife (Bartee 1991).

The power of ingrained beliefs and traditions is easier to understand when considering the development of young hunters in areas where violations of wildlife laws are common and even accepted. In a study of Idaho poachers which will be released in Fall 1991, it was found young hunters learn to poach at the same time they learn legal hunting, and that by the fifth grade they consider poaching acceptable behavior (Machlis 1991). Dave Hall of the USFWS, who has worked extensively with wildlife outlaws in Louisiana and elsewhere, agrees with this conclusion. Most of the people who illegally take large amounts of game have a genuine love of wildlife but acquired their illegal habits from their fathers (who acquired their habits from their fathers, etc.). You have to understand and accept that before you can work with them to turn them around (Hall 1991).

A significant contributor to game law violations is the belief of many individuals that game laws aren't "real laws." Unfortunately, this attitude is not limited to outlaws. In an interview with Bob Marshall of the New Orleans, La. *Times-Picayune,* reformed poacher Dennis Treitler described coming in from the marshes with a hundred or more ducks: "But so would the lawyers and doctors and judges. Everyone did it so it had to be alright"(Marshall 1989). Such attitudes date back to when this continent was settled by Europeans. *Game Wars* author Marc Reisner writes, "To a starving European peon, who was shot on sight if he entered the duke's

wildlife preserve, a game law was simply another instrument of oppression (and a game warden, who was just a loyal peon with a gun, was the most contemptible figure on Earth). In a nation of immigrants just liberated from landlessness and crowdedness and monarchy, game laws, like forestry laws and zoning laws and gun control laws, were resisted with a singular passion." Even today, game wardens enforcing the law often receive little respect and are sometimes on the receiving end of abuse and even violence. The report on a USFWS investigation of waterfowl hunting clubs in Texas contained numerous examples of derogatory and threatening remarks about game wardens, especially federal agents (Texas Waterfowl Operation 1988).

The undercover case in Texas also illustrates the results-oriented attitude that has become common, especially when hunters are paying large sums in guide or club fees. This attitude has been characterized as "I paid all this money, so somebody owes me a duck/deer/etc." Benson (1980) notes, "Hunters were the first, and they continue to provide money necessary for proper management of wildlife in the United States. Yet, contribution of money has become a crutch (and a weak argument) used by hunters to justify their sport. Money is not important. It is the action behind the money that counts." Unfortunately, the money spent by hunters often (especially in the case of big-game hunting) is used to rationalize abandoning the principles of fair chase, breaking the law, or both. For instance, legendary guide and outfitter Ron Hayes, before his conviction in 1987, routinely used aircraft to herd grizzlies to hunters. Now reformed, Hayes cooperated with *National Geographic Television* to produce a documentary on poaching. While demonstrating his technique, Hayes claimed that all 37 grizzlies he helped hunters place in the Boone & Crockett record book were illegally herded (*Anchorage Daily News* 1990).

Increasing hunters' understanding of their role in wildlife management is a worthy goal, and in coming years the role of the hunter in wildlife management will receive significantly greater attention in hunter education courses. At this point in time it is common to see articles in the sporting press outlining the financial contributions made by hunters to wildlife conservation. The driving theme is to provide hunters with information which will enable them to counter the claims of anti-hunters. There also are numerous articles on hunter ethics. What appears to be lacking is combining the two topics. Both now and in the future, as we educate hunters about their vital role in conservation, we must at the same time emphasize the concept that hunters do not actually buy wildlife through license fees, excise taxes, etc. All they have a right to expect is the chance to pursue game in a safe, legal and ethical manner.

Hunter Behavior

In *A Sand County Almanac,* Aldo Leopold tells us "A peculiar virtue in wildlife ethics is that the hunter ordinarily has no gallery to applaud or disapprove of his conduct. Whatever his acts, they are dictated by his own conscience, rather than a mob of onlookers. It is difficult to exaggerate the importance of this fact." What was true in Leopold's time is just as true today — even the best enforcement efforts will not catch all or even most violators. A report by the General Accounting Office states the USFWS is unable, due to staffing limitations, to investigate many suspected violations. The report goes on to say they receive numerous requests from the states for assistance but are unable to respond (GAO 1991). Many in the law enforcement community feel voluntary compliance with wildlife laws needs to be emphasized.

The task of hunter education and wildlife management professionals is to instill the values which will cause hunters to act in an ethical or sportsmanlike manner. When questioned on where the emphasis of efforts to improve hunter attitudes (and therefore behavior) should be placed, 37.5 percent of the HECs participating in this study preferred better hunter education but 47.5 percent favored a combination of hunter education and stricter enforcement. None of the respondents favored stricter enforcement alone, although several indicated stricter enforcement combined with publicity about offenders is in order. However, even though 67.5 percent indicated penalties for game law violations have grown more severe in the past five years, 91 percent of U.S. HECs and 50 percent of Canadian HECs feel stricter punishment is needed to influence hunters in their jurisdiction to obey the law.

Comments included with the above answers indicated a belief that along with education, peer pressure can be an effective tool in changing attitudes. This corresponds to the findings of Jackson and Hall (1989) in which, when asked to rank-order the most effective deterrents to committing waterfowl violations, outlaws rated better training in hunting skills first, and publicizing the names of violators and their crimes to cause personal embarrassment by their peers second. Hall goes on to say that for hard-core violators the loss of hunting privileges, the loss of hunting equipment and jail sentences are what they fear instead of fines. However, research suggests it is doubtful relatively severe penalties will have a measurable effect without the perception that such penalties will be imposed (Beattie, Giles and Cowles, 1977).

In evaluating hunter behavior and ethics in the U.S. and Canada, this study has in some instances asked

HECs to provide data from 1985 on in order to determine trends (if any). The mid 1980s seemed a logical reference point for two reasons. First, by then most states attempting to utilize the guidelines laid out in the 1981 IAFWA report on hunter education would have had ample time to implement changes to their hunter education/outreach programs. The second reason is that data from a nationwide survey of hunter education students certified in 1985 is currently under review and will be published later this year. Since many items in the survey of students deal with ethics and behavioral issues, it may be possible to combine information from two sources (HECs and hunter education students) to obtain a clearer picture of the current state of hunter ethics and the effectiveness of hunter education and other forms of outreach in which ethical behavior is encouraged.

Ethics/Behavioral Problems

In outlining the HEC survey findings on hunter ethics violations, this report will group ethical and legal problems that directly impact hunter/landowner relations together. Only 25 percent of the U.S. respondents indicated an improvement in hunter/landowner relations over the past five years. Of the remainder, 25 percent reported little or no change, while 50 percent reported a decline. In contrast, none of the Canadian HECs reported a decline in hunter/landowner relations. This finding, combined with the fact that 94 percent of the U.S. HECs felt the closure of private land to hunting was increasing in their respective jurisdictions, indicates special consideration of hunter/landowner relations issues is warranted. However, general hunter ethics problems will be explored first.

The most striking finding of this study is the overwhelming agreement on the game species most often the target of illegal or unethical hunting practices. In the U.S., 72 percent of the respondents listed deer, and another 25 percent listed deer and another species. In Canada 43 percent listed deer, and another 29 percent listed deer and another species. There is general agreement in the hunting fraternity that deer hunting is the focus of the anti-hunting movement's public relations/fund-raising efforts, so the fact that 97 percent of U.S. and 72 percent of Canadian HECs cite deer hunting as the cause of most ethical lapses is particularly troubling. We should not abandon sound, long-range planning in favor of reacting to anti-hunter strategies. However, this is clearly an area requiring immediate attention. One survey item asked HECs what they would choose to focus on (and why) if for some reason they could only promote one aspect of hunter ethics. As expected, there were several different answers (i.e., landowner relations, respect, responsibility), but 63 percent of the respondents listed hunter image. In explaining, few HECs cited anti-hunting pressure directly, but their comments suggest overcoming the negative stereotype of hunters would have several positive results, one of which would be countering the efforts of the anti-hunters.

In this study, HECs were asked to list in order the five most serious breaches of hunter ethics in their jurisdiction. Trespassing or hunting without permission was the most frequently listed item, and road hunting/improper vehicle use was next. A 1990 survey of fair chase issues and hunting found road hunting was the top area of concern among state agencies. Over 80 percent of the states listed it as a concern and had taken steps to control it (Ethics and Fair Chase 1991). Although there are undoubtedly exceptions, private landowners seldom give permission for individuals to engage in practices commonly referred to as "road hunting." Even though road hunters usually look for game from public roads, they often shoot game standing on private property. Therefore one could argue road hunting is, sometimes, a form of trespassing.

Other hunter ethics problems receiving a great deal of mention were (in descending order) lack of respect toward game or resources, hunter/landowner relations, overbagging, and illegal tag use/party hunting. A more complete listing can be found in Appendix A. Of the six items mentioned, all but overbagging and lack of respect toward game or resource have grown worse in recent years. Respondents were given the opportunity to note whether their list of most serious problems had changed during the past five years. Only 27.5 percent said there was any difference at all, and for the most part the differences listed were minor. This suggests that our most serious hunter ethics problems are chronic, and growing worse. Although some of the data being discussed here is based on subjective responses, there is some objective data to support them. Not all hunter education programs are attached to wildlife law enforcement divisions, but 82 percent of the respondents had access to violation data. When asked to provide the three most commonly cited offenses, 47.5 percent of the HECs listed license/tag violations. Other common offenses (in descending order) were loaded/uncased guns in vehicles (35 percent), trespassing/hunting without permission (20 percent), and road hunting (17.5 percent). A more complete listing can be found in Appendix B.

Hunter/Landowner Relations

The nature of hunting makes it a difficult activity to observe and therefore measure. Bromley (1989) notes,

"If hunters know they are under observation they may not behave normally. Hunting is frequently a dispersed recreational activity, making it difficult to observe the hunter without being detected." Due to differences in laws, regulations and customs among jurisdictions (and sometimes within a given state or province), law enforcement statistics alone are an inadequate indicator of hunter behavior. The number and type of citations written are more meaningful when considered along with other information. Although some studies on public hunting grounds have been conducted, most land (and therefore potential hunting ground) is privately owned. However, access to private land and the relationship between hunters and landowners has been the subject of considerable research in recent years. When combined with law enforcement data the information obtained in such studies yields a clearer picture of hunter behavior and ethics.

Problems between hunters and landowners are not new. Painter (1980) said, "Lack of common courtesy and causing damage, not safety, are seen by landowners as the major problems with hunters today. Breaking down fences, leaving gates open, tearing up property or vegetation with vehicles, littering and spooking cattle and domestic animals are specific examples of the kinds of hunter behavior that landowners find objectionable." Abler (1981) reported 35 percent of Georgia landowners had problems with hunters, most of which involved hunting without permission and damage to the landowner's property. Jackson and Anderson (1982) reported two out of three Wisconsin landowners experience trespassing, and almost half see a game law violation during a nine-day deer gun season. They went on to say their research suggested hunters themselves failed to see the seriousness of trespassing and vandalism. Such findings, combined with research on landowners' hunter access policies, is troubling. Wright and Fesenmaier (1988) reported, "Landowners' attitudes towards past experiences with hunters related closely with access policies in that those landowners with positive experiences with hunters tended to allow access to their properties more freely." The image issue discussed earlier is important here also if there is, in fact, a cause-and-effect relationship between landowner perception of hunters and access policy.

When asked to rate the change (if any) in hunter/landowner relations in their jurisdictions over the past five years, 50 percent of the U.S. HECs said they were "somewhat worse" or "much worse." Only 25 percent responded "somewhat better" or "much better," and 25 percent indicated little or no change. In Canada, the opposite seems to be the case since 50 percent of the HECs said hunter landowner relations were "somewhat better" or "much better" while the remainder indicated little or no change. In a related question, 82.5 percent of the respondents said the closure of private land to hunters was increasing in their jurisdiction. Again, there was a significant difference in the U.S. and Canadian response. While 94 percent of the U.S. HECs reported increased land closings, only 38 percent of the Canadian HECs said closure of private land was increasing.

HECs who reported an increase in the closure of private land were asked to list the three most commonly cited reasons for closing land to hunting. (Appendix D) Although trespassing was first on 37.5 percent of the HECs lists, the answers listed most frequently were poor hunter attitude/behavior (48.6 percent), vandalism/destruction/theft (43 percent), and trespassing (43 percent).

Restricted access as a result of leasing arrangements was mentioned on 40 percent of these surveys. Leasing arrangements included: leasing rights for profit (the most commonly cited), leasing by clubs and individuals, and leasing land but restricting rights for family or friends. This is consistent with the results of a nationwide study of recreational access policies by Wright, Cordell, and Brown (1990), which found 5 percent of landowners were actively charging fees for outdoor recreation, the majority of which was for hunting. They also noted the number of landowners adopting a fee recreation policy has increased since 1977.

IV. Promoting Better Hunter Ethics

Determining which hunter ethics problems are the most serious is by itself of little use. This study has also examined the means by which hunter ethics is being or can be encouraged. When asked to list how their state or province promoted hunter ethics, 77 percent of the HECs listed hunter education courses first (five of the respondents did not rank order their list). The only other categories ranked first were radio and television public service announcements (8.5 percent) and behavior workshops (1 response). Since hunter education is offered in all states and provinces and is mandatory in most, this result was expected. What was surprising about the answers to this question was that despite the numerous pamphlets on ethical or responsible hunter behavior, posters and pamphlets were rated in the bottom half of 80 percent of the respondents' lists.

Given the shortages of staff time and funding cited by most of the study participants, the most effective use of resources can be obtained by duplicating

programs and teaching/training methods which have been most successful. Given the variations in demographics, game populations, availability of hunting grounds, as well as differences in the type and amount of hunter behavioral data kept, any conclusions about the effectiveness of a given program involve subjective interpretations. On the other hand, there are proven methods for imparting or clarifying values and ethics.

Raths, Harmin and Simon (1966) tell us, "Values clarification presents an empirical theory that says if we occasionally focus students' attention on issues in their lives, and if we then stimulate students to consider their choices, their prizings, and the action, then the students will change their behavior." Since individuals' personal ethics are based on their values, we can consider hunter ethics training in the context of Raths' values clarifying process in which the following sequence usually occurs:

- Attention is focused on an issue in life.
- Acceptance of students is communicated.
- An invitation is offered to reflect further on choices, prizings and actions

Raths emphasizes for the process to take hold, a value must have been freely chosen from among alternatives after reflection, been prized and cherished, and publicly affirmed to others. In reporting on research into this approach, Raths, Wassermann, Jonas and Rothstein (1986) conclude, "On the basis of these studies we can be reasonably sure that if teachers work with students in ways that put emphasis on thinking, changes will take place in the behavior of the students."

When asked what methods of teaching hunter ethics instructors felt were most effective, 95 percent of the HECs listed one or more forms of interactive learning (i.e., role plays, discussion, dilemmas, "trigger films"), all of which can be effective in Raths' values clarification process. Since the ethics/responsibility portion of virtually all hunter education courses uses one or more such methods of instruction, it would be reasonable to expect more positive findings on hunter behavior than are noted in this report. The discrepancy can be accounted for in several ways — the amount of time spent on ethics-related training, the quality of the instruction, and the lack of reinforcement of high ethical standards in the field.

On average, just over two hours of instruction in hunter education courses are devoted primarily to ethics/responsibility. The two terms are listed this way because most courses use them interchangeably. However, not all such instruction is ethics oriented. Information provided by the HECs indicates approximately 25 percent of this time is spent on topics which are not ethics-related (i.e., hunt preparation, how to avoid hypothermia, etc.), and 27.5 percent said half (or less) of the time allotted for ethics/responsibility is used for hunter ethics instruction. Also, 77.5 percent of the respondents indicated four or more different methods of teaching hunter ethics are used in their course.

According to the information provided, the average course only has about one and one-half hours dedicated to hunter ethics, so relatively little time is spent with a given teaching technique. Another consideration is most hunter education courses use lectures and role-plays when teaching hunter ethics. Although both methods can be effective, they minimize overall class participation. Since an essential part of the value clarification process is publicly discussing and affirming one's position on a given topic or issue, the limitation of lectures is obvious. Role-plays are an excellent way to illustrate a situation, but unless the class breaks down so that each student acts as both a participant and an evaluator, overall student involvement, and therefore effectiveness of role-plays, is limited.

All but one of the HECs participating in this study indicated audiovisuals are yet another means used to teach hunter ethics. Despite the initial—sometimes dramatic—impact of many such aids, without follow-up discussion, films and videos are subject to the same limitations as lectures and role-plays. The use of "trigger films" designed to provoke discussion has grown in recent years. However, despite their effectiveness when properly used, some instructors are uncomfortable with them. The fact is for many instructors, open discussion, although recognized as the most productive learning environment, is not a teaching method with which they are comfortable. This should not be interpreted as criticism of hunter education instructors, since even professional educators often prefer the classroom control found in authoritarian teaching methods such as lectures or programmed instruction.

Hunter education in its present form would not be possible without an extensive network of volunteer instructors which at this time numbers upward of 50,000. Almost three-fourths of the HECs participating in this study reported 95 percent or more of their instructors were volunteers. Although some instructors teach for a living, the average instructor is not an educator by profession. This was not as significant during the early years of hunter education which concentrated on one area — safety. Safety is necessarily a subject on which there is little, if any, doubt about right and wrong. In teaching safe handling and use of firearms, there are clear standards which can be easily taught in the classroom as well as in the field. The relatively clear-cut nature of safety instruction lends

itself to an authoritarian style of teaching, with which the average instructor is most comfortable. The dramatic decline in accidents as hunter education became widespread suggests that, at least for the safety issue, hunter education and its instructional methods have been very effective. However, value-oriented instruction, which is better suited to a subject such as ethical behavior, requires give-and-take discussions that are not always easily controlled.

Most hunter education instructors receive 10 to 20 hours of training, much of which is necessarily devoted to firearms safety. Less than half of the HECs said some type of refresher training for instructors was required. When asked if instructor training should be expanded, 85 percent of the HECs said yes. Unfortunately, few are able to do so at this time due to funding and staff limitations. HECs were given a choice of four areas in which they would recommend changes or improvements to enhance instructors' ability to teach hunter ethics. Instructor training was the first or second choice of 57.5 percent of the respondents, and class exercises were rated first or second by 47.5 percent. Audiovisual aids were rated first or second by 30 percent, and students handouts were rated first or second by only 15 percent of the respondents.

Questions about ethics in hunter education courses yielded answers consistent with those addressing the ethics portion of hunter instructor training. For example, over 72 percent of respondents agreed with the statement, "Different training aids are needed to get the best results in the time allotted," while only 5 percent disagreed. Although some individuals believe hunter ethics cannot be taught, over 77 percent of HECs participating in this study indicated the subject could be taught effectively. HECs in the U.S. were relatively neutral on the subject of whether instructors would oppose changes to permit more time to be spent on hunter ethics. However, Canadian HECs felt their instructors would oppose such changes.

HECs in both the U.S. and Canada expressed overwhelming support (87.5 percent) for the concept that ethics/responsibility should be emphasized as much as safety. There was less support (although still strong) for the statement, "Ethical/responsible behavior should be the main theme in hunter education" with 77.5 percent in agreement . This sentiment is consistent with the titles of courses, since almost 75 percent of the HECs listed their course title as "Hunter Education" or some similar variation. However, 35 percent of the HECs indicated safety is the primary theme in their course. An additional 40 percent listed safety, then ethics/responsibility/sportsmanship but with one exception, safety was listed first.

A review of written course materials sent in by participating HECs showed all U.S. programs use the *Hunter Education Manual* published by Outdoor Empire. A review of this student guide shows 9.5 percent of the text is devoted to hunter responsibility. An additional 25.6 percent of the pages contain a reference to ethics, sportsmanship, responsibility, etc. All but two of the U.S. HECs indicated their student manual is used during their hunter education course. Given the relatively small number of Canadian provinces, their lack of a standardized text, and the inability of some of their HECs to provide copies, no generalizations should be made about the written course materials used in Canada.

While we have considered the time devoted to hunter ethics, the length of the overall course is also relevant. HECs report that most instructors exceed the minimum course time specified by state or provincial guidelines. In the U.S., overall course length ranges from 10 to 21 hours, with the average course being just over 13 hours in length. In Canada, courses range from 10 to 35 hours in length, with the average being 18.5 hours. This means that in both the U.S. and Canada, less than 12 percent of the average hunter education course is devoted to hunter ethics.

The number of course sessions varies, but virtually all courses meet for at least two sessions. For instructors there is additional time, due to set-up and take-down of displays, registration, etc., so it is fair to say for both instructors and students there is a significant investment of time. As already noted, HECs did not feel some portions of the course should be cut back to allow more time for hunter ethics. The majority (55 percent) also disagreed with the idea of lengthening their course to allow more time for hunter ethics, while 30 percent felt their hunter education course should be expanded.

While state/provincial-sponsored hunter education courses are overwhelmingly the primary means by which hunter ethics is promoted, there are other means by which ethical behavior is encouraged. For instance the National Bowhunter Education Foundation course has a strong ethics component, and the National Rifle Association teaches a hunter education course that also promotes ethical behavior. Three fourths of the HECs participating in this study indicated other forms of outreach to hunters in their jurisdiction in which hunter ethics is promoted. These include public service announcements and other uses of print and electronic media, seminars and workshops, involvement of sportsmens' clubs, and school-based programs such as Project Wild. Opinions on effectiveness of such programs are evenly divided, with half the respondents indicating such programs have a measurable effect and the rest saying "no" or "undecided." However, there is almost no objective data on which their conclusions are based.

When asked if they had to choose a single avenue to promote hunter ethics, what would it be and why, the responses were decidedly mixed. Judging by the responses, it is possible different HECs answered from either a short or long-term perspective. School-based education was cited several times, and the response of one HEC summed up this philosophy by saying, "Begin developing general responsibility at an early age—as early as 5 years old in the school system. If an individual chooses to hunt the lessons can be focused." However, many of the responses seemed geared toward more immediate action, such as television or advanced clinics for seasoned hunters. This is consistent with a question in which HECs were asked what age group was most in need of hunter ethics education/outreach. Sixty percent of the respondents indicated an age range that included hunters at least 20 years of age, and most of these responses encompassed the 25-35 age group. Of the HECs who listed an age range under 20, many expressed the sentiment it was too late to do anything about the older hunters. This supports the majority opinion that "older hunters" who are the role models for beginning hunters are in need of some type of targeted outreach. Since HECs are fairly evenly split on the issue of whether recertification should be required, it appears such an effort will have to occur outside of traditional hunter education courses.

Effects of Hunter Education/ Outreach on Hunter Ethics

Any evaluation of which hunter education programs are most effective in promoting ethical behavior is at best a subjective exercise. There are simply too many uncontrollable variables to make a scientific judgement, especially since some of the data provided by the HECs is itself based on subjective interpretations or opinions rather than objectively obtained statistics. However, we can look for correlations between certain survey items. States and provinces in which hunter education courses devote more time to hunter ethics and emphasize interactive instruction should be expected to show improvement in many of the items listed in Appendix C. It could be argued that items rated as showing little or no change are indicative of effective ethics outreach, but since most jurisdictions report increased closure of private lands to hunting, and the majority indicate a worsening of hunter/landowner relations, the data provided is at best contradictory.

There has been some success in promoting better hunter behavior. For example, the Grass Roots Ike Program, described by Kiefer (1985), proved successful in improving relations between hunters and landowners in a Wisconsin county. Most HECs listed a variety of ways (besides hunter education) in which ethics is encouraged. These ranged from species-specific advanced hunter education seminars, to sportsmans' groups, to schools and churches. Just over half the HECs indicated such initiatives had a positive effect on hunter ethics. However, only three of these HECs indicated their response was based on any objective measurement such as law enforcement data or surveys.

One of the objectives of this study was to determine whether some states were more effective in promoting ethical behavior by hunters. Regrettably, the information on hunter behavior provided by the HECs precludes making any such assessment. As a result there seems little basis at this time for concluding any given hunter education program is measurably more effective in promoting ethical hunter behavior.

V. Discussion and Recommendations

Most individuals involved in this study have not been surprised by the findings on which hunter behavior problems are most serious, although the magnitude of certain behaviors is cause for concern. Hunter behavior and ethics undoubtedly falls under the human dimensions aspect of wildlife management, which is a relatively new field of study and therefore lacking in longitudinal data from which trends can be established. Accordingly, this study attempted not only to assess hunter ethics but also any associated trends. Since there appears to be an overall decline in hunter/landowner relations, and the reasons given are somewhat supported by law enforcement data, the trends in hunter ethics are not encouraging. On the other hand, recognizing that a problem exists is the first step toward fashioning a solution. Local examples of successful attempts to promote ethical hunter behavior suggest it is possible to have a positive impact on hunter behavior and hunter/landowner relations. Although some statewide efforts (outside of hunter education) to promote these issues have been attempted, none have been proven to have any measurable effect at this time.

While the reported decline in hunter/landowner relations is cause for concern, another and perhaps more disturbing trend showed up in this survey. Although there are exceptions, the average hunter in most states seldom has to pay fees to hunt on privately

owned land. However, there is a noticeable trend toward pay-for-use land access, which could, in the future, financially prevent some individuals from hunting. It is doubtful this trend, along with the general trend of increasing closure of private land to hunting, will have any positive effect on hunter behavior as more hunters will be crowded onto an ever decreasing amount of land.

As noted earlier in this report, there could be significant changes ahead in hunter education. Live firing will probably become a requirement for certification, and many in hunter education think more time should be spent on the role of the hunter in wildlife management. There is also, as usual, an expressed desire to increase the role of ethics/responsibility in hunter education. In fact, all of these topics were discussed and endorsed at the 1991 meeting of the Hunter Education Association. However, as noted in this study, HECs as a group are opposed to increasing course length (as are many instructors) or significantly altering the basic hunter education course. Obviously, the contradiction between the desire for change and the willingness to make changes must be resolved. Information obtained in this study can be helpful in resolving this matter, and several recommendations are included here.

Recommendation 1:

HECs and instructors should commit to elevating hunter ethics\responsibility to the same status as hunter safety.

With over 600,000 first-time hunters going through hunter education courses every year, hunter education is not only the primary means by which states and provinces encourage ethical hunter behavior, it will probably remain so. There are few people who would question the fact hunter education has been effective in reducing hunting accidents. Safety is, and should continue to be, a vital part of hunter education. However, it is common to hear hunter education referred to as "hunter safety," and several individuals involved in this study believe this is indicative of the attitude of the average instructor.

The 1981 IAFWA report on hunter education noted that only 26 percent of the average course was devoted to hunter ethics/responsibility and recommended the topic be elevated to equal standing with the safety portion of the course. Not only has this not occurred, there appears to be even less time spent on ethics/responsibility than in 1981 since the average course now devotes less than 12 percent of its time to the subject. Many HECs say ethics is continually touched on throughout the course. However, given the information provided on hunter/landowner relations and behavior, the effectiveness of this approach is questionable.

How to increase attention to ethics without harming the effectiveness of safety instruction is a perplexing question. Having an overriding theme, such as safety, makes training more effective. A common opening in hunter education courses is the instructor telling students, "If you don't learn anything else, learn to think safety." There are variations on this theme, but perhaps we should encourage instructors to replace the word *safety* with *responsibility*. The instructor can then define responsibility as safe *and* ethical hunting.

Recommendation 2:

Adult hunters must be targeted for hunter ethics education and/or outreach.

In the ideal world, hunter education courses would merely reinforce the concept of ethical hunting that a given youngster has learned at home. However, we must accept that hunter education must do more. Some adults resent the fact that hunter education is mandatory in most places and think the job of teaching their children how to hunt, and what is right and wrong, is their job. On the other hand, if this study is any indication, the job isn't getting done. Improving hunter ethics must involve more than upgrading the ability of hunter education courses to promote the subject. Most beginning hunters are youth, but even an adult beginner seldom takes to the field without a mentor. Most "experienced" hunters who serve as role models for beginners are at least 25-30 years old. Despite mandatory hunter education in most states, many older hunters have not been through a hunter education course. The majority do not attend even when they have a child taking the course. One HEC thought he was getting excellent parent participation, even though only 25 percent of the students in his state had a parent or other relative attending hunter education with their children.

No matter how good a job we do in teaching hunter ethics to youth, the effort will probably be wasted if the lessons are not reinforced in the field by adults. Of course, it is difficult to convince someone who has hunted for 10 or 20 years they need to go to hunter education. Most HECs, including those supportive of periodic recertification, agree there is resistance to the concept. Such resistance, combined with staff and funding shortages, make it unlikely that adults will be required to attend hunter education, at least in the foreseeable future.

The findings of this and other studies suggest adults are as much in need of ethics outreach as youth. We

are all conditioned to accept reacquainting ourselves with fundamentals in several areas of our lives. For example, a driver's license must be periodically renewed. While most of us consider doing so a nuisance, the test is both a reminder of how conditions change and of our need to update our knowledge. The question for hunter educators is how to voluntarily get older hunters into a forum in which hunter ethics is taught. Obviously, we can try to influence parents to attend hunter education with their children. We must also add ethics to meetings attended by adult hunters. For example, sportsman's clubs often have meetings and special events at which a hunter ethics program could be presented. Such clubs can also exert a great deal of peer pressure to hunt ethically. Another suggestion received in this study was town meetings held by conservation officers to talk over any changes in game laws from the previous year. An ethics component could easily be added to such a meeting.

Recommendation 3:

To evaluate the effectiveness of hunter education and outreach efforts, HECs need to adopt and utilize a standard evaluation instrument.

Since a standardized Accident Report Form was adopted this year, some HECs may feel this recommendation is unnecessary, but in order to identify and address hunter ethics problems we must look beyond safety issues. Early in this study it became apparent that some of the information about hunter ethics being sought would involve subjective judgements rather than objective measurements. However, "soft" data on the subject is preferable to no data.

Most HECs are attached to law enforcement divisions or have access to such information. Accordingly, they are in the best position to make judgements about hunter behavior and their state's ability to successfully encourage proper hunter ethics. The problem is that beyond gathering accident or violation statistics, there is little ongoing effort to measure hunter behavior. The lack of information about what is actually happening is one of the greatest hindrances to improving hunter education and outreach. Without a procedure for measuring cause and effect, we cannot properly identify and prioritize problems. There is also no way to measure the effect of any solution(s).

Virtually all HECs have indicated time and staff shortages are the main reasons they cannot expand their hunter education efforts. While this recommendation will create additional work for HECs, it will also permit them to use the resources they have more effectively.

Recommendation 4:

Involve hunter education instructors more closely in the evaluation of problems and development of hunter education solutions to promote better hunter ethics.

The hunter education system can be a powerful force in promoting better hunter ethics. Since any changes to hunter education will be presented to students by the instructors, it follows the fastest and most cost-efficient way to improve ethics in hunter education is to modify instructor training. However, before taking such a step it would be wise to seek input directly from instructors on the issues discussed in this report.

During the course of this study, many instructors have complained they were shut out of the process. Although these individuals do not constitute a representative sample, there has been no disagreement with the concept of soliciting direct input from instructors on whether and how to change basic hunter education. In fact, the Hunter Education Association unanimously endorsed the idea of a large-scale assessment of instructors opinions on the effectiveness and future needs of hunter education.

At this time, few HECs systematically solicit and use instructor input on what happens in the hunter education classroom, and this should be corrected. However, instructors can do more than "present the message" we want delivered to students. They can also act as evaluators of the success of a given approach to promoting hunter ethics. We should explore ways in which instructors can act as monitors in and around their communities for the type of information called for in Recommendation 3.

VI. Conclusion

The findings of this report are no cause for celebration among hunters or hunter education professionals. However, gathering information on what problems and needs exist is a necessary step to fashioning workable solutions. While some of the findings in this report are troubling, the fact that agencies, organizations and individuals involved in wildlife management and hunter education have participated in this effort is encouraging. As has happened so often in the past, hunters have seen a problem and are working on a solution. Hopefully, this report will make a meaningful contribution to the process.

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APPENDICES

APPENDIX A

Survey respondents were asked to list in order the five most serious hunter ethics problems in their state or province. The numbers in parentheses indicate the U.S./Canada breakdown of the total responses in a given position in the table.

	1a	1b	1c	1d	1e	Total
Trespassing/no permission	(16/2) 18	(4/1) 5	(0/0) 0	(2/1) 3	(0/0) 0	26
Improper vehicle use/road hunting	(3/0) 3	(4/1) 5	(3/1) 4	(4/0) 4	(2/2) 4	20
Lack of respect to game/resource	(1/1) 2	(2/1) 3	(5/0) 5	(3/1) 4	(0/3) 3	17
Hunter/landowner relations	(2/2) 4	(2/0) 2	(2/0) 2	(3/0) 3	(3/0) 3	14
Overbagging	(0/0) 0	(4/1) 5	(3/0) 3	(1/1) 2	(3/0) 3	13
Illegal tag use/party hunting	(4/0) 4	(1/0) 1	(0/1) 1	(0/0) 0	(6/0) 6	12
Irresponsible attitude/behavior	(0/0) 0	(2/0) 2	(3/0) 3	(3/0) 3	(3/0) 3	11
Littering	(0/0) 0	(0/0) 0	(3/1) 4	(4/1) 5	(1/0) 1	10
Game law violations/illegal hunting	(2/1) 3	(2/2) 4	(1/0) 1	(0/0) 0	(0/0) 0	8
Unsafe hunting	(1/0) 1	(0/0) 0	(0/2) 2	(1/1) 2	(2/0) 2	7
Vandalism/property damage	(0/0) 0	(1/0) 1	(0/1) 1	(3/1) 4	(1/0) 1	7
Lack of respect for others	(1/0) 1	(2/1) 3	(1/1) 2	(0/0) 0	(1/0) 1	7
No license	(1/0) 1	(1/0) 1	(0/0) 0	(0/0) 0	(3/0) 3	5
Improper display or care of game	(1/0) 1	(1/0) 1	(1/0) 1	(0/0) 0	(1/1) 2	5
Hunting out of season	(0/0) 0	(2/0) 2	(1/0) 1	(1/1) 2	(0/0) 0	5
Poaching	(0/0) 0	(0/0) 0	(2/0) 2	(2/0) 2	(0/0) 0	4
Night hunting/outside legal hours	(0/0) 0	(1/1) 2	(1/0) 1	(1/0) 1	(0/0) 0	4
Lack of proficiency/knowledge	(0/0) 0	(0/0) 0	(1/1) 2	(1/0) 1	(0/1) 1	4
Hunting too close to buildings	(0/1) 1	(2/0) 2	(0/0) 0	(0/0) 0	(0/0) 0	3
Illegal baiting	(0/0) 0	(0/0) 0	(2/0) 2	(0/0) 0	(0/0) 0	2
Loaded gun in vehicle	(1/0) 1	(0/0) 0	(0/0) 0	(0/0) 0	(0/0) 0	1
Antler point violations	(0/0) 0	(1/0) 1	(0/0) 0	(0/0) 0	(0/0) 0	1
Illegal sale of game parts	(0/0) 0	(0/0) 0	(1/0) 1	(0/0) 0	(0/0) 0	1
Resistance to mandatory hunter education	(0/0) 0	(0/0) 0	(1/0) 1	(0/0) 0	(0/0) 0	1
Alcohol/drug use while hunting	(0/0) 0	(0/0) 0	(0/0) 0	(1/0) 0	(0/0) 0	1
Unplugged guns	(0/0) 0	(0/0) 0	(0/0) 0	(0/0) 0	(1/0) 1	1

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APPENDIX B

Respondents were asked to list in order the three violations most commonly cited by wildlife enforcement officers. The numbers in parentheses indicate the U.S./Canada breakdown for a given item.

	14a	14b	14c	Total
License/permit violation	(3/3) 6	(5/1) 6	(6/1) 7	19
Loaded or uncased gun in vehicle	(4/3) 7	(4/1) 5	(1/1) 2	14
Trespassing/no permission	(1/0) 1	(4/0) 4	(2/1) 3	8
Tag violations	(3/1) 4	(1/0) 1	(2/0) 2	7
Illegal possession (big game)	(4/0) 4	(1/0) 1	(1/1) 2	7
Road hunting/shooting from vehicle	(3/0) 3	(0/0) 0	(4/0) 4	7
Blaze orange	(1/0) 1	(2/0) 2	(2/1) 3	6
Night hunting/spotlighting	(2/0) 2	(0/1) 1	(1/1) 2	5
Hunting out of season	(0/0) 0	(2/1) 3	(2/0) 2	5
Shooting before/after legal hours	(0/0) 0	(2/1) 3	(1/0) 1	4
Unplugged gun	(1/0) 1	(1/0) 1	(0/0) 0	2
Unlawfully taken game	(0/0) 0	(2/0) 2	(0/0) 0	2
Discharge too close to building/dwelling	(0/0) 0	(1/0) 1	(1/0) 1	2
Over limit	(0/0) 0	(0/0) 0	(2/0) 2	2
Manner of conveyance	(1/0) 1	(0/0) 0	(0/0) 0	1
Violate Wildlife Management Area regulations	(1/0) 1	(0/0) 0	(0/0) 0	1
Littering	(0/0) 0	(1/0) 1	(0/0) 0	1
Big game poaching	(0/0) 0	(0/1) 1	(0/0) 0	1
Baiting	(0/0) 0	(0/0) 0	(0/1) 1	1

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APPENDIX C

Respondents were asked to rate any change in the listed behavior in their jurisdictions over the past five years. The numbers in parentheses indicate the breakdown of U.S./Canada responses for each item.

	Much Better 1	Somewhat Better 2	Little Or No Change 3	Somewhat Worse 4	Much Worse 5	U.S. Mean	Canada Mean	Combined Mean
a. Hunting out of season	(4/1) 5	(10/3)13	(15/2)17	(3/1) 4	(0/0) 0	2.53	2.25	2.48
b. Exceeding bag limits	(0/1) 1	(8/1) 9	(18/4)22	(3/2) 5	(1/0) 1	3.0	2.88	2.98
c. Trespassing	(1/2) 3	(5/2) 7	(9/3)12	(13/1)14	(5/0) 5	3.53	2.38	3.3
d. Property damage	(0/2) 2	(7/1) 8	(13/3)16	(9/2)11	(1/0) 1	3.19	2.63	3.01
e. Spotlighting	(4/1) 5	(9/3)12	(7/2) 9	(11/0)11	(1/1) 2	2.72	2.43	2.67
f. Baiting	(0/0) 0	(4/0) 4	(11/3)14	(10/0)10	(4/1) 5	3.53	3.5	3.53
g. Hunting from vehicles	(1/1) 2	(5/1) 6	(9/4)13	(14/1)15	(3/0) 3	3.38	3.0	3.3
h. Skybusting	(1/1) 2	(3/1) 4	(17/4)21	(3/0) 3	(2/0) 2	2.92	2.5	2.84
i. Hunting without a license	(2/3) 5	(6/1) 7	(17/1)18	(6/3) 9	(1/0) 1	2.97	2.5	2.88
j. Improper/illegal equipment	(0/1) 1	(5/3) 8	(22/2)24	(3/2) 5	(2/0) 2	3.06	2.63	2.98
k. Littering	(0/0) 0	(12/4)16	(7/3)10	(8/1) 9	(5/0) 5	3.16	2.63	3.05
l. Using borrowed license/tag	(1/1) 2	(4/2) 6	(19/3)22	(6/2) 8	(1/0) 1	3.07	3.0	3.05
m. Hunting from aircraft	(1/1) 2	(1/1) 2	(15/3)18	(2/1) 3	(0/0) 0	2.8	3.2	2.88
n. Hunting in standing crops	(0/1) 1	(1/2) 3	(12/3)15	(2/0) 2	(0/0) 0	2.94	2.33	2.77
o. Taking non-game animals	(1/0) 1	(6/5)11	(19/3)22	(4/0) 4	(0/0) 0	2.87	2.38	2.76
p. Commercial hunting	(1/1) 2	(5/2) 7	(13/2)15	(11/1)12	(1/1) 2	3.19	2.86	3.13
q. Hunting too close to roads	(0/0) 0	(4/4) 8	(12/1)13	(10/1)11	(2/0) 2	3.39	2.5	3.24
r. Hunting too close to occupied dwellings	(0/0) 0	(3/5) 8	(12/1)13	(10/1)11	(3/0) 3	3.46	2.75	3.31
s. Illegal/unethical use of electronic devices	(0/0) 0	(4/1) 5	(21/3)24	(5/1) 6	(0/0) 0	3.03	3.0	3.02
t. Shooting before or after legal hours	(2/0) 2	(4/3) 7	(16/4)20	(9/1)10	(0/0) 0	2.91	2.75	2.88
u. Failure to pursue wounded game	(1/0) 1	(2/2) 4	(18/4)22	(6/1) 7	(2/0) 2	3.21	2.86	3.14
v. Illegal/unethical use of dogs	(1/0) 1	(2/2) 4	(21/3)24	(7/0) 7	(1/0) 1	3.12	2.6	3.08
w. Shooting game for another hunter	(0/1) 1	(4/3) 7	(18/3)21	(6/1) 7	(3/0) 3	3.26	2.63	3.13
x. Alcohol/drug related incidents	(1/2) 3	(4/2) 6	(18/3)21	(5/1) 6	(1/0) 1	3.04	2.34	2.89
y. Illegal/unethical use of off-road vehicles	(0/0) 0	(2/0) 2	(7/4)11	(14/3)17	(7/0) 7	3.74	3.86	3.76

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APPENDIX D

Respondents who indicated closure of private land was increasing in their jurisdiction were asked to provide in order the three most commonly given reasons. The numbers in parentheses indicate the U.S./Canada breakdown.

	5a	5b	5c	Total
Poor hunter behavior/attitude	(3/0) 3	(8/1) 9	(4/0) 4	17
Trespassing	(13/0)13	(2/0) 2	(0/0) 0	15
Vandalism/destruction/theft	(3/1) 4	(6/0) 6	(5/0) 5	15
Safety concerns	(1/0) 1	(2/0) 2	(7/0) 7	10
New owner changing policy	(3/1) 4	(1/1) 2	(3/0) 3	9
Leasing rights for profit	(3/0) 3	(5/0) 5	(0/1) 1	9 *
Development/population growth	(3/0) 3	(2/0) 2	(2/1) 3	8
Fear of liability	(0/0) 0	(1/0) 1	(3/0) 3	4
Anti-hunting sentiment	(0/1) 1	(0/1) 1	(1/1) 2	4
Limit lease to family/friends	(0/0) 0	(1/0) 1	(3/0) 3	4 *
Illegal hunting	(0/0) 0	(1/0) 1	(0/0) 0	1
Leasing by clubs	(1/0) 1	(0/0) 0	(0/0) 0	1 *

* Various forms of leasing restrictions total 14, making it the third most commonly listed reason for land closing.

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APPENDIX E

Respondents were asked to rate the following statements on a scale of 1 (strongly agree) to 5 (strongly disagree). The numbers in parentheses indicate the breakdown of U.S./Canada responses.

	1	2	3	4	5	U.S. Mean	Canada Mean	Combined Mean
Hunter ethics and hunter responsibility mean the same thing in our course.	(16/4) 20	(6/1) 7	(2/0) 2	(3/2) 5	(4/0) 4	2.19	2.38	2.23
Ethical/responsible behavior should be the main theme of our hunter education.	(9/3) 12	(16/3) 19	(2/0) 2	(4/1) 5	(1/1) 2	2.13	2.25	2.15
Courses should be lengthened to allow more time for hunter ethics.	(2/0) 2	(8/2) 10	(6/3) 9	(6/2) 8	(9/1) 10	3.28	3.25	3.28
Some portions of the course should be cut back to allow more time for hunter ethics.	(4/0) 4	(9/1) 10	(6/1) 7	(8/3) 11	(4/3) 7	3.03	4.0	3.23
Emphasis on hunter ethics should remain the same or decrease because the topic cannot be taught effectively.	(1/0) 1	(4/2) 6	(2/0) 2	(7/1) 8	(18/5) 23	4.16	4.13	4.15
No significant changes to hunter education are warranted at this time.	(1/0) 1	(5/1) 6	(4/1) 5	(12/3) 15	(10/2) 12	3.78	3.38	3.7
Different training aids are needed to get the best results in the time allotted.	(7/2) 9	(17/3) 20	(6/2) 8	(1/1) 2	(1/0) 1	2.09	2.25	2.13
Most instructors would oppose significant changes to permit more time to be spent on hunter ethics.	(1/1) 2	(11/3) 14	(8/2) 10	(9/1) 10	(3/1) 4	3.06	2.75	3.0
Ethics/responsibility should be emphasized as much as safety.	(17/3) 20	(10/5) 15	(1/0) 1	(2/0) 2	(2/0) 2	1.84	1.63	1.8
We should consider reviewing and perhaps changing the focus of hunter education in North America.	(4/1) 5	(14/4) 18	(5/3) 8	(6/0) 6	(3/0) 3	2.69	2.25	2.6

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